

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	54	"5648064"	US-PGPUB; USPAT; USOCR	OR	ON	2005/03/28 14:56
L2	29	peroxide and hexametaphosphate and trimetaphosphate and starch and stearate	US-PGPUB; USPAT; USOCR	OR	ON	2005/03/28 15:51
L3	550	252/186.2,186.43,186.44.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2005/03/28 15:54
L4	281	3 and peroxide	US-PGPUB; USPAT; USOCR	OR	ON	2005/03/28 15:55
L5	13893	(calcium or magnesium or ca or mg) with peroxide	US-PGPUB; USPAT; USOCR	OR	ON	2005/03/28 15:57
L6	60	3 and 5	US-PGPUB; USPAT; USOCR	OR	ON	2005/03/28 16:02
L7	7018	sodium with hexametaphosphate	US-PGPUB; USPAT; USOCR	OR	ON	2005/03/28 17:34
L8	995	sodium with trimetaphosphate	US-PGPUB; USPAT; USOCR	OR	ON	2005/03/28 17:34
L9	7662	7 or 8	US-PGPUB; USPAT; USOCR	OR	ON	2005/03/28 16:00
L10	5	6 and 9	US-PGPUB; USPAT; USOCR	OR	ON	2005/03/28 16:40
L11	16	4 and 9	US-PGPUB; USPAT; USOCR	OR	ON	2005/03/28 16:50
L12	2019	"calcium peroxide" "magnesium peroxide"	US-PGPUB; USPAT; USOCR	OR	ON	2005/03/28 17:33
L13	133	12 and 9	US-PGPUB; USPAT; USOCR	OR	ON	2005/03/28 17:32
L14	1	"4135010".PN.	USPAT; USOCR	OR	ON	2005/03/28 17:19
L15	1	"4293426".PN.	USPAT; USOCR	OR	ON	2005/03/28 17:19
L16	1	"4321301".PN.	USPAT; USOCR	OR	ON	2005/03/28 17:24

L17	4	("3351558" "2733215").pn.	US-PGPUB; USPAT; USOCR	OR	ON	2005/03/28 17:32
L18	457	"calcium peroxide" "magnesium peroxide"	EPO; JPO; DERWENT	OR	ON	2005/03/28 17:33
L19	732	sodium with hexametaphosphate	EPO; JPO; DERWENT	OR	ON	2005/03/28 17:34
L20	95	sodium with trimetaphosphate	EPO; JPO; DERWENT	OR	ON	2005/03/28 17:34
L21	0	18 and 19 and 20	EPO; JPO; DERWENT	OR	ON	2005/03/28 17:34
L22	1	peroxide and 19 and 20	EPO; JPO; DERWENT	OR	ON	2005/03/28 17:35

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NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 "Ask CAS" for self-help around the clock
NEWS 3 FEB 25 CA/CAPLUS - Russian Agency for Patents and Trademarks
 (ROSPATENT) added to list of core patent offices covered
NEWS 4 FEB 28 PATDPAFULL - New display fields provide for legal status
 data from INPADOC
NEWS 5 FEB 28 BABS - Current-awareness alerts (SDIs) available
NEWS 6 FEB 28 MEDLINE/LMEDLINE reloaded
NEWS 7 MAR 02 GBFULL: New full-text patent database on STN
NEWS 8 MAR 03 REGISTRY/ZREGISTRY - Sequence annotations enhanced
NEWS 9 MAR 03 MEDLINE file segment of TOXCENTER reloaded
NEWS 10 MAR 22 KOREAPAT now updated monthly; patent information enhanced
NEWS 11 MAR 22 Original IDE display format returns to REGISTRY/ZREGISTRY
NEWS 12 MAR 22 PATDPASPC - New patent database available
NEWS 13 MAR 22 REGISTRY/ZREGISTRY enhanced with experimental property tags

NEWS EXPRESS JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT
 MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
 AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005

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***** STN Columbus *****

FILE 'HOME' ENTERED AT 17:38:03 ON 28 MAR 2005

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE
ENTRY

TOTAL
SESSION

FULL ESTIMATED COST

0.21 0.21

FILE 'CAPLUS' ENTERED AT 17:38:21 ON 28 MAR 2005

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FILE COVERS 1907 - 28 Mar 2005 VOL 142 ISS 14
FILE LAST UPDATED: 27 Mar 2005 (20050327/ED)

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> s calcium peroxide or magnesium peroxide

715205 CALCIUM

32 CALCIUMS

715208 CALCIUM

(CALCIUM OR CALCIUMS)

189428 PEROXIDE

43895 PEROXIDES

206466 PEROXIDE

(PEROXIDE OR PEROXIDES)

789 CALCIUM PEROXIDE

(CALCIUM(W) PEROXIDE)

421964 MAGNESIUM

88 MAGNESIUMS

421998 MAGNESIUM

(MAGNESIUM OR MAGNESIUMS)

189428 PEROXIDE

43895 PEROXIDES

206466 PEROXIDE

(PEROXIDE OR PEROXIDES)

326 MAGNESIUM PEROXIDE

(MAGNESIUM(W) PEROXIDE)

L1 992 CALCIUM PEROXIDE OR MAGNESIUM PEROXIDE

=> s sodium hexametaphosphate

970550 SODIUM

34 SODIUMS

970559 SODIUM

(SODIUM OR SODIUMS)

4851 HEXAMETAPHOSPHATE

440 HEXAMETAPHOSPHATES

5097 HEXAMETAPHOSPHATE

(HEXAMETAPHOSPHATE OR HEXAMETAPHOSPHATES)

L2 1414 SODIUM HEXAMETAPHOSPHATE

(SODIUM(W) HEXAMETAPHOSPHATE)

=> s sodium trimetaphosphate

970550 SODIUM

34 SODIUMS

970559 SODIUM

(SODIUM OR SODIUMS)

1103 TRIMETAPHOSPHATE

141 TRIMETAPHOSPHATES

1167 TRIMETAPHOSPHATE

(TRIMETAPHOSPHATE OR TRIMETAPHOSPHATES)

L3 364 SODIUM TRIMETAPHOSPHATE

(SODIUM(W) TRIMETAPHOSPHATE)

=> s l1 and l2 and l3

L4 0 L1 AND L2 AND L3

=> s peroxide and l2 and l3

189428 PEROXIDE
43895 PEROXIDES
206466 PEROXIDE

(PEROXIDE OR PEROXIDES)

L5 0 PEROXIDE AND L2 AND L3

=> s l2 and l3

L6 14 L2 AND L3

=> d l6 1-14 ti

L6 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

Citing
References

TI Synthesis of platy precipitated calcium carbonate

L6 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

Citing
References

TI Gypsum boards having increased resistance to permanent deformation and method and composition for producing it

L6 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

Citing
References

TI Compositions and methods for surface treating set gypsum with phosphate salts

L6 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

Citing
References

TI Slow-release solid-chemical composition and method for anaerobic bioremediation

L6 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

Citing
References

TI Wet gypsum accelerator and methods, composition, and product relating thereto

L6 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

Citing
References

TI Manufacture of gypsum-containing boards having increased sag resistance

L6 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

Citing
References

TI Final report on the safety assessment of sodium metaphosphate, **sodium trimetaphosphate**, and **sodium hexametaphosphate**

L6 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

Citing
References

TI Gypsum boards with enhanced resistance to shrinkage and to permanent deformation

L6 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

Citing
References

TI Constant temperature polymerization for food-grade trisodium

trimetaphosphate

L6 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

Chem
References

TI Agents for treatment of high-COD cooling water

L6 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

Chem
References

TI The location of the polyphosphate-binding sites on cytochrome c measured by NMR paramagnetic difference spectroscopy

L6 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

Chem
References

TI Effects of condensed phosphates on crystallization of ammonium chloride crystals

L6 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

Chem
References

TI Sodium metaphosphates

L6 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

Chem
References

TI Exchange studies between **sodium trimetaphosphate** and **sodium hexametaphosphate** using radioactive phosphorus

=> d l6 4 all

L6 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

Full
Text

AN 2002:522538 CAPLUS
DN 137:83028
ED Entered STN: 12 Jul 2002
TI Slow-release solid-chemical composition and method for anaerobic bioremediation
IN Hince, Eric Christian
PA USA
SO U.S. Pat. Appl. Publ., 16 pp.
CODEN: USXXCO
DT Patent
LA English
IC ICM C12N009-00
ICS C12N009-98
NCL 435187000
CC 60-6 (Waste Treatment and Disposal)
Section cross-reference(s): 19, 61

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	<u>US 2002090697</u>	A1	20020711	<u>US 2001-755473</u>	20010106
	<u>US 6620611</u>	B2	20030916		
PRAI	<u>US 2001-755473</u>		20010106		

CLASS

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

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<u>US 2002090697</u>	ICM	C12N009-00
	ICS	C12N009-98
	NCL	435187000
<u>US 2002090697</u>	ECLA	B09C001/00B; B09C001/10; C12N009/98

AB The present invention discloses the formulations, forms and functions of advanced solid-chem. compns. which provide balanced, sustained-release sources of sol. and insol. org. substrates and complex inorg. phosphates, as well as other beneficial agents, which when used as intended, provides for relatively simple and inexpensive means of enhancing the anaerobic bioremediation and dehalogenation of halogenated org. contaminants, such as trichloroethene (TCE), as well as the biol. mediated chem. redn. of oxidized forms of certain inorg. contaminants, such as chromium (VI), uranium (VI), and arsenate-based pesticides. Preferred embodiments of the disclosed solid-chem. compns. include the incorporation of a broad and balanced suite of sol. org. substrates including sol. sugars, molasses and milk; sol. org. salts; and sol. org. polymers. The solid-chem. compns. and the preferred forms thereof provide a simple and cost-effective means for supplying other beneficial amendments and agents to enhance the breakdown of environmental contaminants including org. and inorg. sources of nitrogen; simple inorg. phosphates; chelating agents; disintegrants; fillers; binders and pH buffers; lubricants and glidants; plant-material and org.-polymer degrading enzymes; and inoculum for different types of microorganisms, including microorganisms which produce the aforementioned plant-material and org.-polymer degrading enzymes. The disclosed solid-chem. compns. provide improved means of creating and maintaining anaerobic and reducing conditions which favor the biol. mediated chem. redn. and anaerobic biodegrdn., transformation, and/or detoxification of recalcitrant contaminants present in solid and liq. wastes, waste waters, soils, sediments, ground-waters, surface-water bodies and other environmental media. The solid-chem. compns. are preferably produced and applied in the forms of granules, briquettes, pellets, tablets, and capsules, and the like. Thus, a preferred compn. comprises 2.5-50 wt% molasses; 5-65 wt% powd. or granulated corn sugar, white sugar, brown sugar, and org. sugar, or combinations thereof; 1-25 wt% powd. or granulated milk; 0.25-50 wt% sodium CM-cellulose; 2.5-65 wt% sodium formate; 1-25 wt% cellulose powder; 0.25-15 wt% powd. grain starch; 0.5-25 wt% alfalfa meal; 0.5-25 wt% **sodium hexametaphosphate, sodium trimetaphosphate**, and combinations thereof; 0.1-2 wt% magnesium stearate; 0.0001-0.5 wt% org. polymer and plant material degrading enzymes; and, 0.0001-0.5 wt% org. polymer-producing, plant material-degrading microorganism inoculum.

ST bioremediation solid sustained release microorganism org substrate inorg phosphate

IT Flours and Meals

(alfalfa, nitrogen source; slow-release solid-chem. compn. and method for anaerobic bioremediation)

IT Eubacteria

(anaerobic or facultative; slow-release solid-chem. compn. and method for anaerobic bioremediation)

IT Fungi

(anaerobic; slow-release solid-chem. compn. and method for anaerobic bioremediation)

IT Soil reclamation

Water purification

(biol.; slow-release solid-chem. compn. and method for anaerobic bioremediation)

IT Malt

(ext.; slow-release solid-chem. compn. and method for anaerobic bioremediation)

IT Carbohydrates, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (granulated corn; slow-release solid-chem. compn. and method for anaerobic bioremediation)

IT Polyphosphates
 RL: NUU (Other use, unclassified); USES (Uses)
 (linear; slow-release solid-chem. compn. and method for anaerobic bioremediation)

IT Gossypium hirsutum
 (lint and fibers; slow-release solid-chem. compn. and method for anaerobic bioremediation)

IT Medicago sativa
 (meal, nitrogen source; slow-release solid-chem. compn. and method for anaerobic bioremediation)

IT Phosphates, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (metaphosphates, ringed; slow-release solid-chem. compn. and method for anaerobic bioremediation)

IT Fabaceae
 Glycine (genus)
 Lathyrus
 Lespedeza
 Medicago
 Phaeophyceae
 Sargassum
 Trifolium
 Vicia
 (nitrogen source; slow-release solid-chem. compn. and method for anaerobic bioremediation)

IT Hydroxides (inorganic)
 RL: NUU (Other use, unclassified); USES (Uses)
 (oxyhydroxides; slow-release solid-chem. compn. and method for anaerobic bioremediation)

IT Enzymes, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (plant material-degrading; slow-release solid-chem. compn. and method for anaerobic bioremediation)

IT Cement
 (portland; slow-release solid-chem. compn. and method for anaerobic bioremediation)

IT Paper
 Paperboard
 (shredded recycled; slow-release solid-chem. compn. and method for anaerobic bioremediation)

IT Arthrobacter
 Aspergillus
 Bacillus (bacterium genus)
 Bradyrhizobium
 Candida
 Chelating agents
 Clostridium
 Fibrobacter
 Flours and Meals
 Geobacter
 Gums and Mucilages
 Hibiscus cannabinus
 Lubricants
 Milk
 Molasses
 Mycoplasma

Nocardia
 Oryza sativa
 Pseudomonas
 Rhizobium
 Sawdust
 Trichoderma
 Yarrowia
 Yeast
 (slow-release solid-chem. compn. and method for anaerobic
 bioremediation)
 IT Fulvic acids
 Humic acids
 Hydroxides (inorganic)
 Lime (chemical)
 Limestone, uses
 Oxides (inorganic), uses
 Phosphates, uses
 Waxes
 RL: NUU (Other use, unclassified); USES (Uses)
 (slow-release solid-chem. compn. and method for anaerobic
 bioremediation)
 IT Polyphosphoric acids
 RL: NUU (Other use, unclassified); USES (Uses)
 (sodium salts; slow-release solid-chem. compn. and method for anaerobic
 bioremediation)
 IT Fats and Glyceridic oils, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (vegetable, hydrogenated; slow-release solid-chem. compn. and method
 for anaerobic bioremediation)
 IT Microorganism
 (yellow boy; slow-release solid-chem. compn. and method for anaerobic
 bioremediation)
 IT 9003-39-8D, crosslinked
 RL: NUU (Other use, unclassified); USES (Uses)
 (Crospovidone; slow-release solid-chem. compn. and method for anaerobic
 bioremediation)
 IT 9005-25-8, Starch, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (corn, tapioca and potato; slow-release solid-chem. compn. and method
 for anaerobic bioremediation)
 IT 7631-99-4, Sodium nitrate, uses 7757-79-1, Potassium nitrate, uses
61538-65-6, Potassium-sodium nitrate
 RL: NUU (Other use, unclassified); USES (Uses)
 (nitrogen source; slow-release solid-chem. compn. and method for
 anaerobic bioremediation)
 IT 50-21-5D, Lactic acid, salts 50-99-7, Glucose, uses 57-11-4, Stearic
 acid, uses 58-86-6, Xylose, uses 59-23-4, Galactose, uses 60-00-4,
 EDTA, uses 62-54-4, Calcium acetate 63-42-3, Lactose 64-18-6D,
 Formic acid, salts 64-19-7D, Acetic acid, salts 77-92-9D, Citric acid,
 salts 110-44-1D, Sorbic acid, salts 127-08-2, Potassium acetate
127-09-3, Sodium acetate 139-13-9, Nitrilotriacetic acid 141-53-7,
 Sodium formate 144-55-8, Sodium bicarbonate, uses 471-34-1, Calcium
 carbonate, uses 557-04-0, Magnesium stearate 563-71-3, Ferrous
 carbonate 590-29-4, Potassium formate 814-80-2, Calcium lactate
994-36-5, Sodium citrate 1398-61-4, Chitin 1592-23-0, Calcium stearate
1758-51-6, Erythrose 3458-28-4, Mannose 4070-80-8, Sodium stearyl
 fumarate 7632-05-5, Sodium phosphate 7722-88-5, Tetrasodium
 pyrophosphate 7757-81-5, Sodium sorbate 7757-93-9, Dicalcium phosphate
7758-29-4, Sodium tripolyphosphate 7778-49-6, Potassium citrate
7785-84-4, **Sodium trimetaphosphate** 9000-01-5, Gum

arabic 9000-07-1, Carrageenan 9000-30-0, Guar gum 9000-36-6, Karaya gum 9000-40-2, Locust bean gum 9000-69-5, Pectin 9000-92-4, Amylase 9001-06-3, Chitinase 9001-62-1, Lipase 9001-92-7, Protease 9002-18-0, Agar 9004-32-4, Sodium Carboxymethylcellulose 9004-34-6, Cellulose, uses 9004-64-2, Hydroxypropylcellulose 9005-31-6, Alginic acid, ammonium-calcium salt 9005-34-9, Ammonium alginate 9005-36-1, Potassium alginate 9005-38-3, Sodium alginate 9005-53-2, Lignin, uses 9012-54-8, Cellulase 9015-78-5, Glucanase 9025-56-3, Hemicellulase 9063-38-1, Sodium starch glycolate 10103-46-5, Calcium phosphate 11132-73-3, Lignocellulose 11138-66-2, Xanthan gum 12698-40-7, Sodium-calcium alginate 14476-12-1, Rhodochrosite 14476-16-5, Siderite 16068-46-5, Potassium phosphate 17375-37-0, Manganese carbonate 18917-93-6, Magnesium lactate 24634-61-5, Potassium sorbate 39421-75-5, Hydroxypropyl guar gum 42613-30-9, Ligninase 51198-15-3, Carboxymethyl guar gum 53006-98-7, Sodium-potassium phosphate 74811-65-7, Croscarmellose sodium 208116-24-9, Triphosphoric acid, potassium-sodium salt

RL: NUU (Other use, unclassified); USES (Uses)

(slow-release solid-chem. compn. and method for anaerobic bioremediation)

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